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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,577

11/24/2003

Lars Christian Fabricius

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BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER

FORD, JOHN K

ART UNIT

PAPER NUMBER

3753

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/718,577

Applicant(s)

FABRICIUS ET AL.

Examiner

John K. Ford

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3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/24/06
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/24/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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Applicant's election of Group II, with traverse, is acknowledged. The traverse based on the fact the UK did not restrict is unpersuasive. Applicant has pointed out no flaw in the restriction requirement under U.S. practice. The examiner grouped claim 20 in with claims 21-35 is because it appears to be directed to the same combination as claims 21-35. Claim 20 is directed to the combination of the commissioning module and heat exchangers, as are claims 21-35. If applicant disagrees explain why. Otherwise, claim 20 should be re-written in independent form for examination with elected claims 21-35. An action on the merits as to claims 20-35 follows.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 35 is an omnibus claim that has been held to be fatally indefinite under U.S. patent practice. Please delete it in response to this action.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 23, 24, 25, 28, 30, 31, 32, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378).

Morgan shows all of the claimed subject matter except a bypass conduit between the fluid supply inlet and the fluid supply outlet. To have provided such a connection would have been obvious to one of ordinary skill in the art as shown by Morgan at bypass 50 (controlled by valve 52) for the purpose of advantageously allowing the use of a single speed pump during low demand situations (as disclosed in Morgan, col. 4, lines 23-27), as opposed to the more expensive modulating type (e.g. variable speed) pump (discussed in Morgan, col. 4, lines 28-29). Likewise, to have provided such a connection would have been obvious to one of ordinary skill in the art as shown by Sueyoshi at bypass circuit 120 (controlled by valve 104) for the purpose of advantageously "lessening the burden on the pump and boiler." Regarding claim 25, Sueyoshi clearly shows a valve immediately below the gas vent 110, an obvious feature to have added to the prior art to isolate the gas vents when not being used. Regarding claim 30, Sueyoshi discloses a test bulb at 112 an obvious feature to have used to test conditions within the fluid circuit. Regarding claim 33, Sueyoshi teaches stainless steel (extremely corrosion resistant) in paragraph 17 of the translation attached thereto, an obvious material to have used to prevent corrosion problems.

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Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of DE 3101070.

To have added a sludge and/or oxygen separator to the aforementioned system to avoid corrosion or contamination of the system would have been obvious to one of ordinary skill in the art.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of Longini (USP 4,509,679).

To have added a flow meter to the aforementioned system at the output of the return header from the plurality of floor heaters and the main system providing the heating fluid would have been obvious to one of ordinary skill in the art to aid in the control of the main pump. See the Longini disclosure related to flow meter 14.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or

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Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of JP 9-210380.

To have used the orifice type flow controllers of JP '380 (see element 51) in place of the variable type shown in the prior art discussed above would have been obvious to reduce the overall cost of the valving.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Dumser (USP 6,089,263) and Morgan (USP 5,284,204) and/or Sueyoshi (JP 2000-346378) as applied to claim 21 above, and further in view of JP 2001-141249.

To have a drain added cock to the bypass to permit faster draining would have been obvious in view of Figure 10 of JP 249, valve V3.

Claims 20, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of the prior art as applied to any one of claim 21-33 above, and further in view of FR 2,560,343.


FR '343 teaches the type of pipe claimed. To have used this type of pipe in the prior art to avoid corrosion would have been obvious to one of ordinary skill in the art.

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Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.



**John K. Ford**  
**Primary Examiner**

